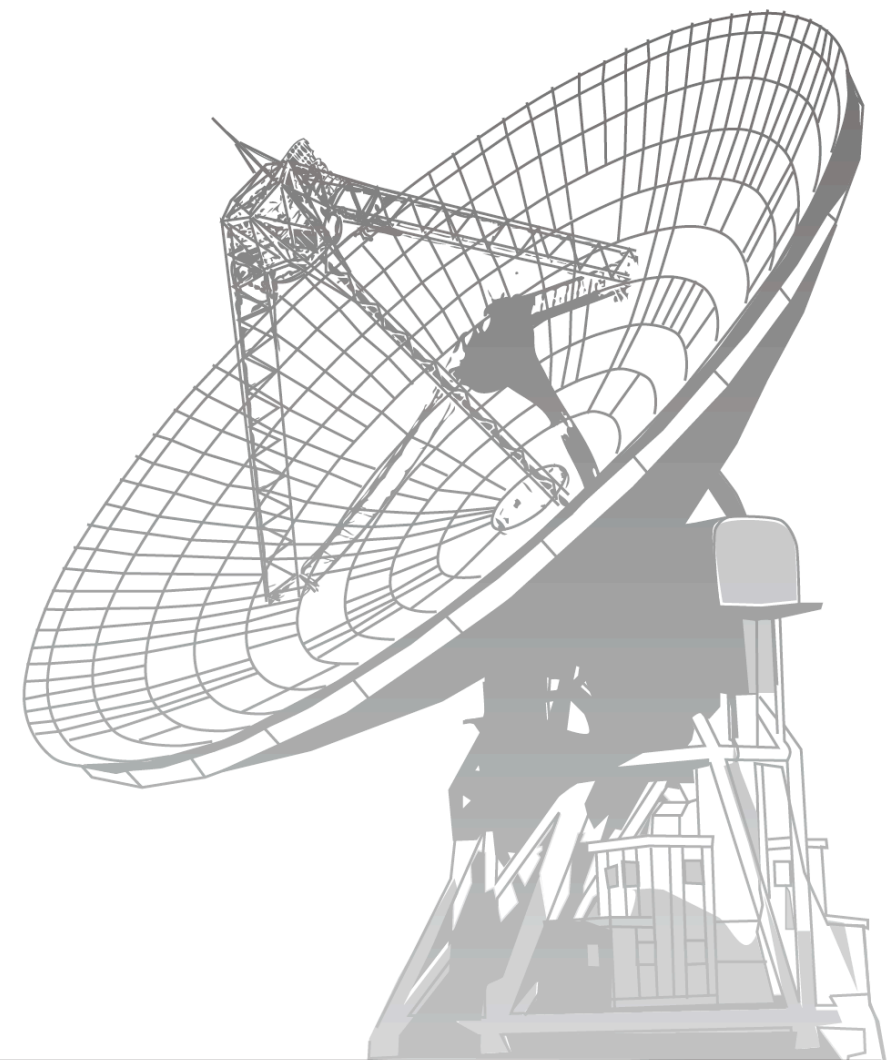


NRO Open-use 2021-2022

Umemoto, Tomofumi (NRO)



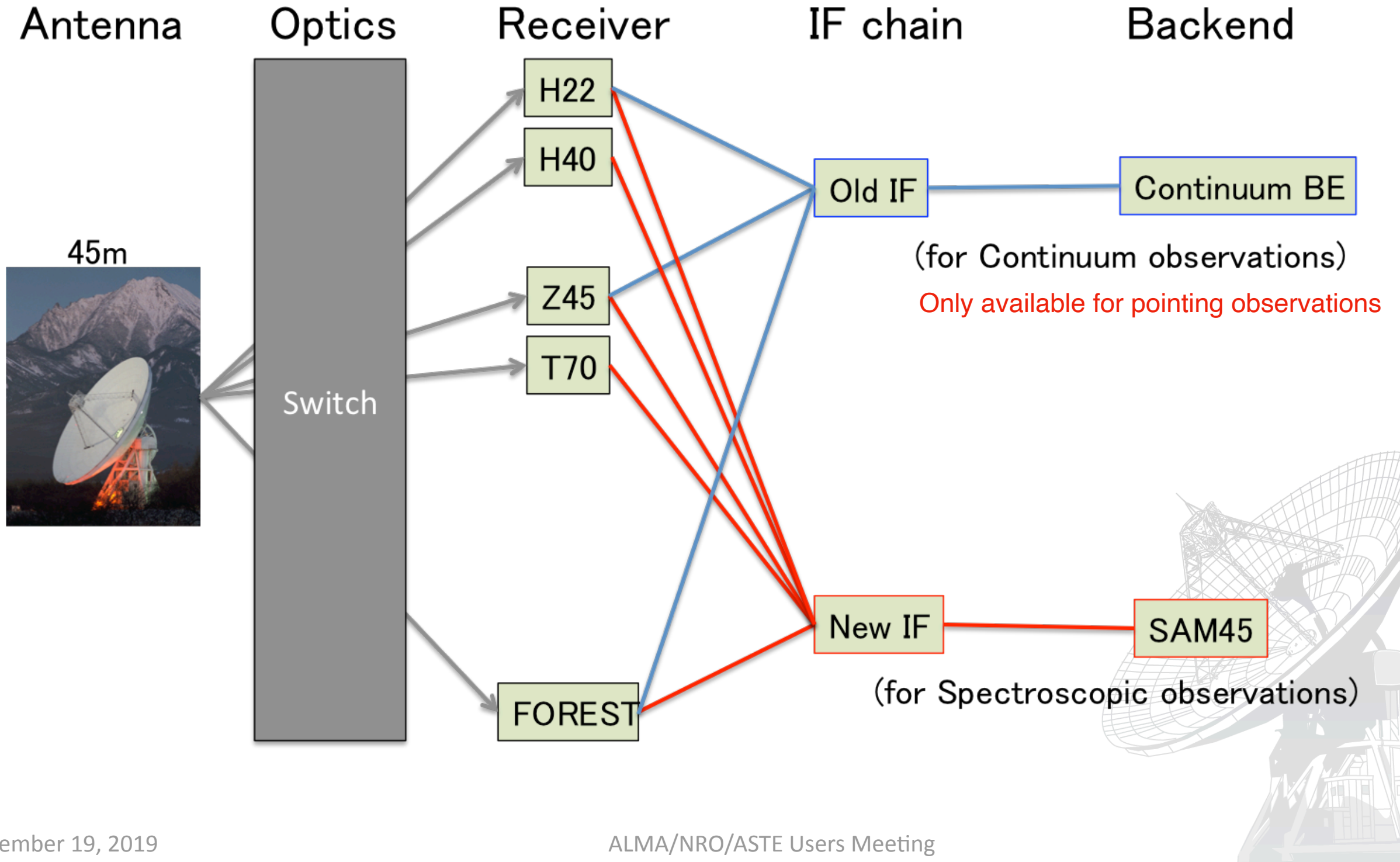
Call for Proposals

- 1400 hrs for open-use including GTO and supplemental time
- H22, H40, Z45, T70 and FOREST open
- **Only one call for proposals**
- Only Regular and GTO Programs
- Only weekdays: from Mon.(9:00 JST) to Sat.(9:00 JST) including national holidays
- Six observing LST slots in units of eight hours
- **All** observations are carried out through **Remote observations** from Mitaka, ASIAA/Taiwan, KASI/Korea and universities/institutes in Japan



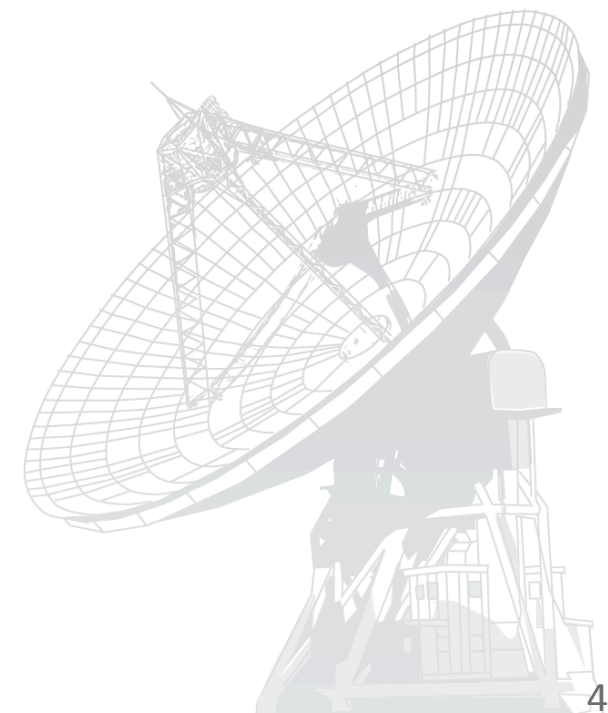
2020-2021 System

Simultaneous observation of H22/H40 is available



Mm/sbmm TAC members (2020-2022)

- Chair: Shinya Komugi (Kogakuin Univ.)
- Vice Chair: Fumitaka Nakamura (NAOJ)
- Min-Young Lee (KASI/Korea)
- Ya-Wen Tang (ASIAA/Taiwan)
- Sachiko Onodera (Meisei Univ.)
- Oct 8th, 2021 (TAC meeting)



Open-Use: Schedule

8/1	Call for Proposal
9/1	Deadline
9/12	Send proposals to referee
10/8	TAC
12/1	Start NRO 45-m open-use
	(No open-use at year-end and New Year Holidays)
3/31	End NRO 45-m open-use

We have **one deadline** for Regular and GTO programs.



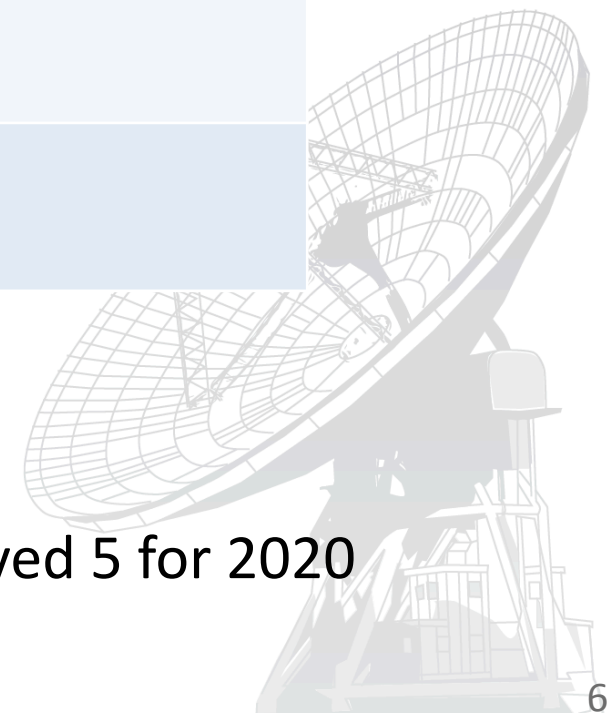
Open-Use: Proposals

2021-2022 (2020-2021)

Category	Submitted	Accepted
Regular	26 (25)	10 (13)
Large >200 hr	- (0)	- (0)
GTO	1 (0)	1 (0)
Total	27 (25)	11 (13)
Foreign countries	10 (5)	3 (2)

Proposals for 2021 was **27**, but we received **25** for 2020

Proposals from foreign countries for 2021 was **10**, and we received 5 for 2020

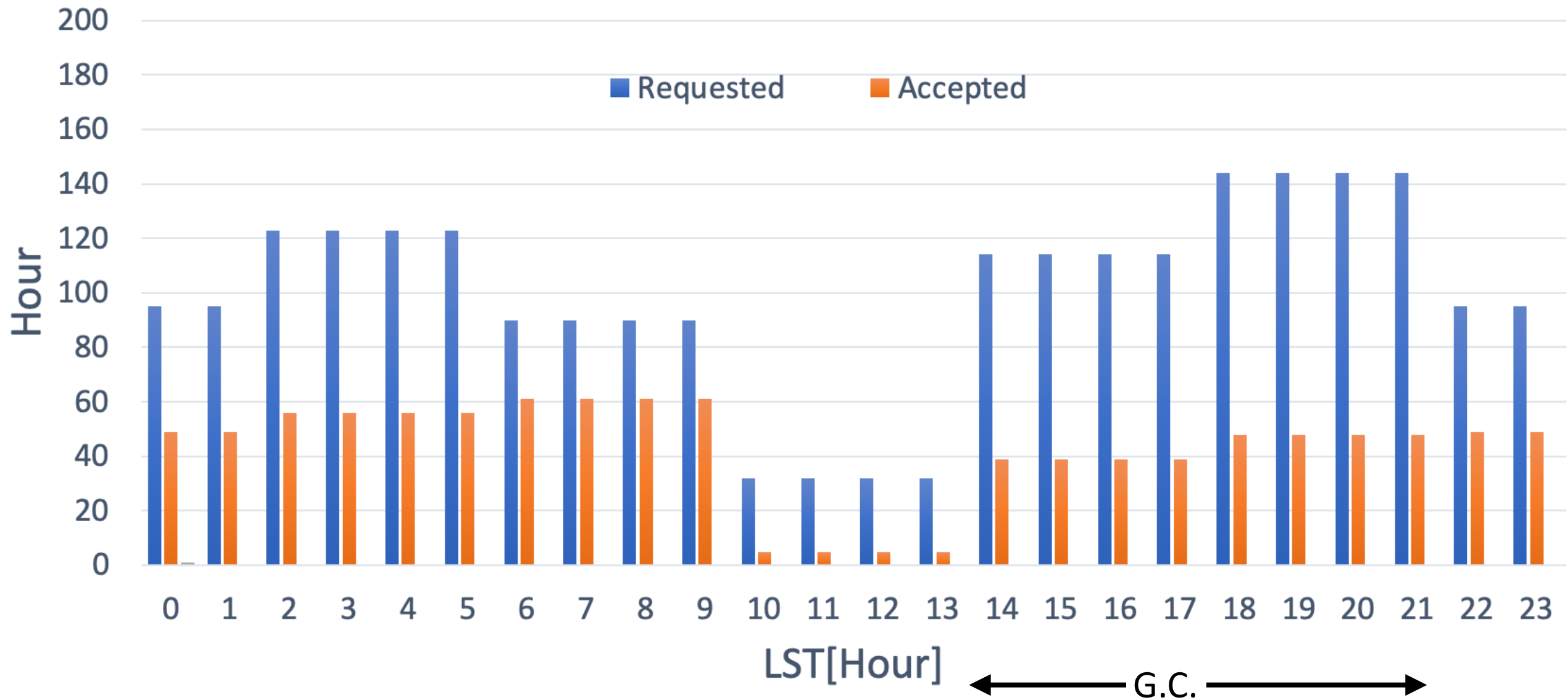


LST range distribution 2020

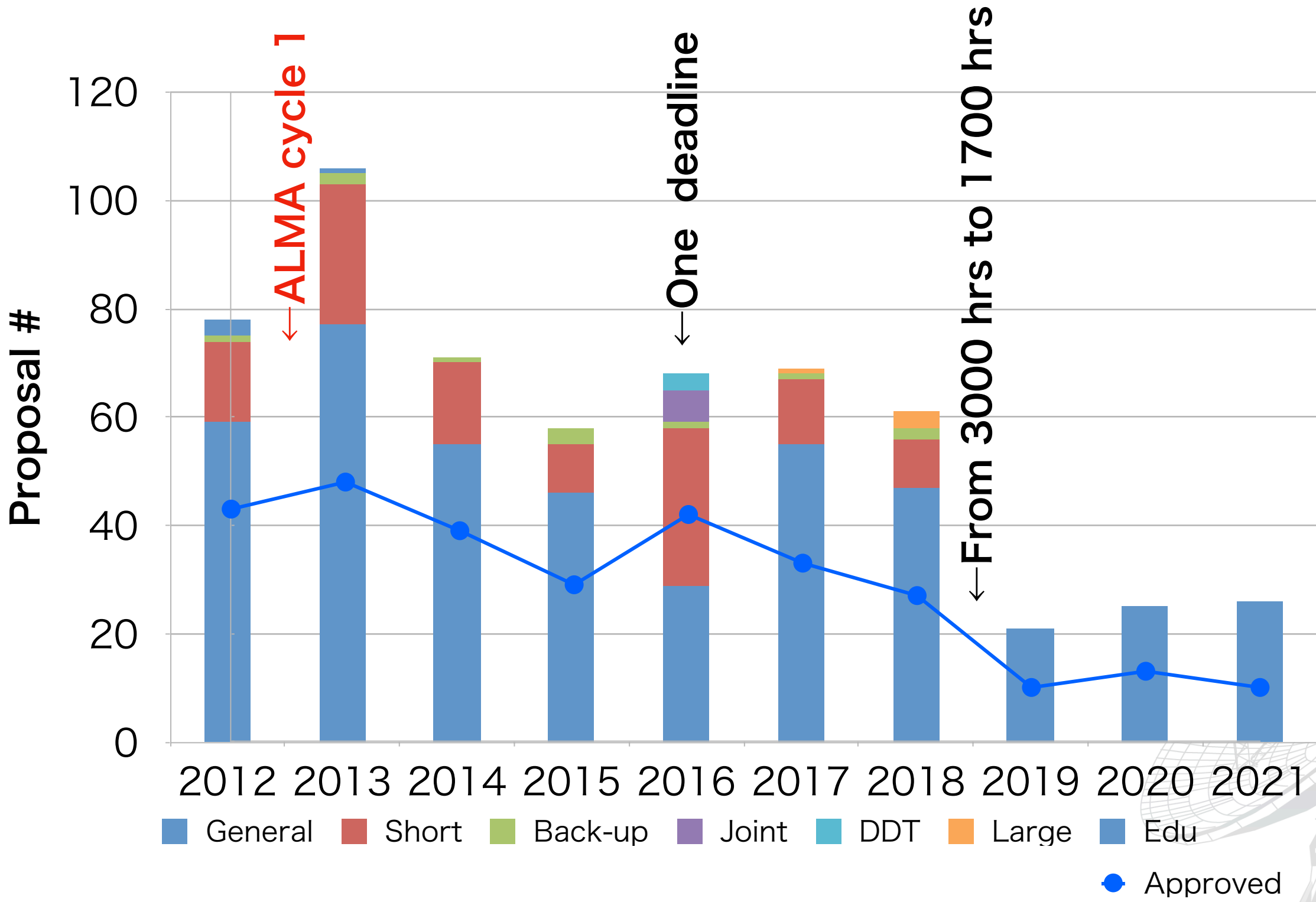


LST range distribution 2021

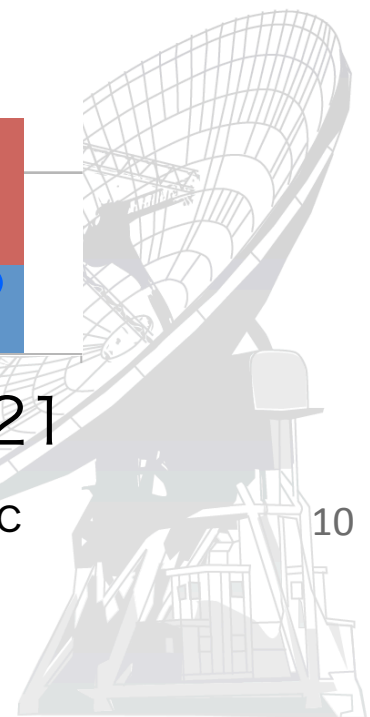
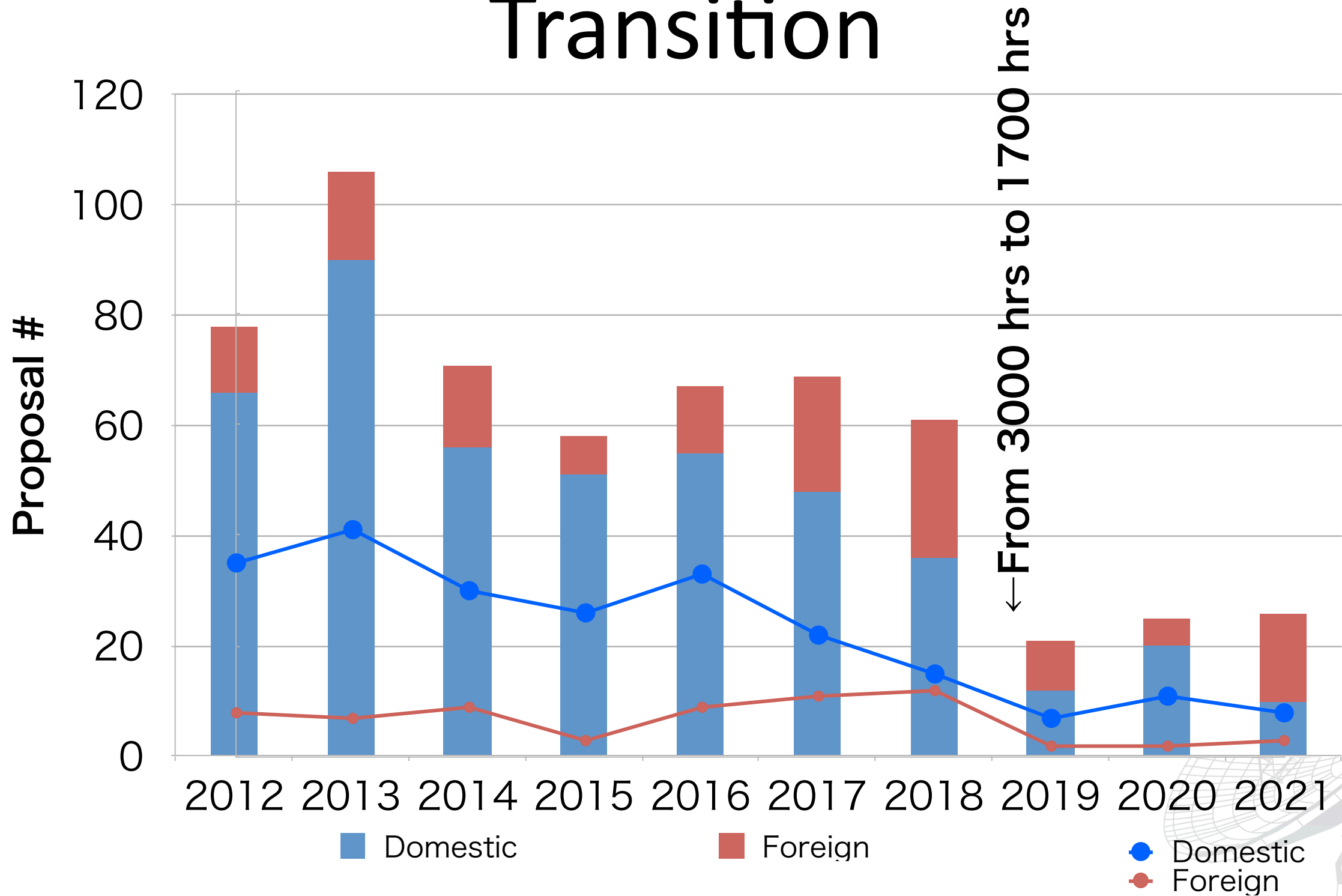
2021-2022 Requested/Accepted Time (NRO45m)



Proposals Transition

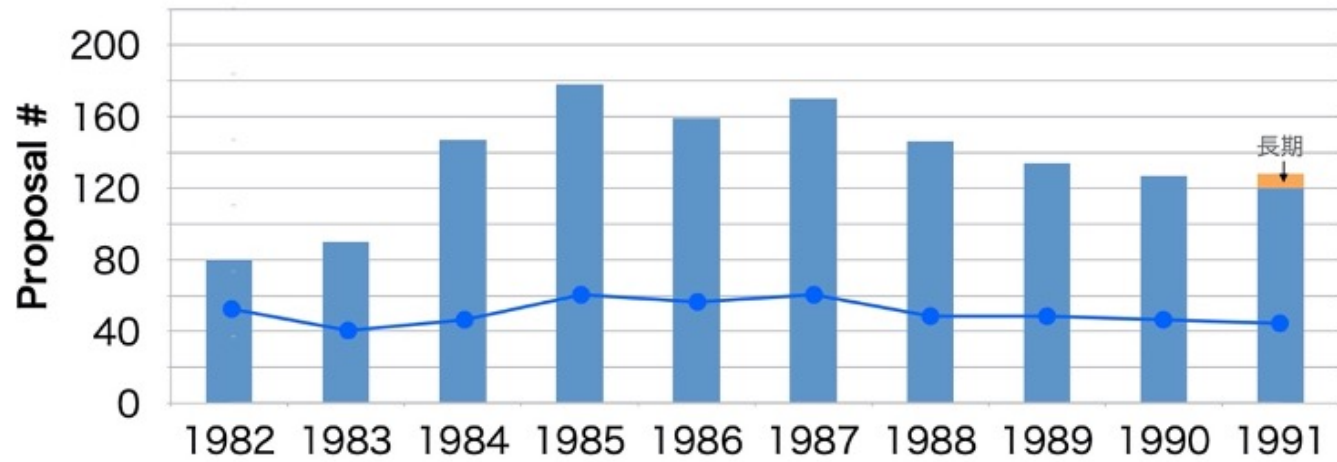


Domestic/Foreign Proposals Transition

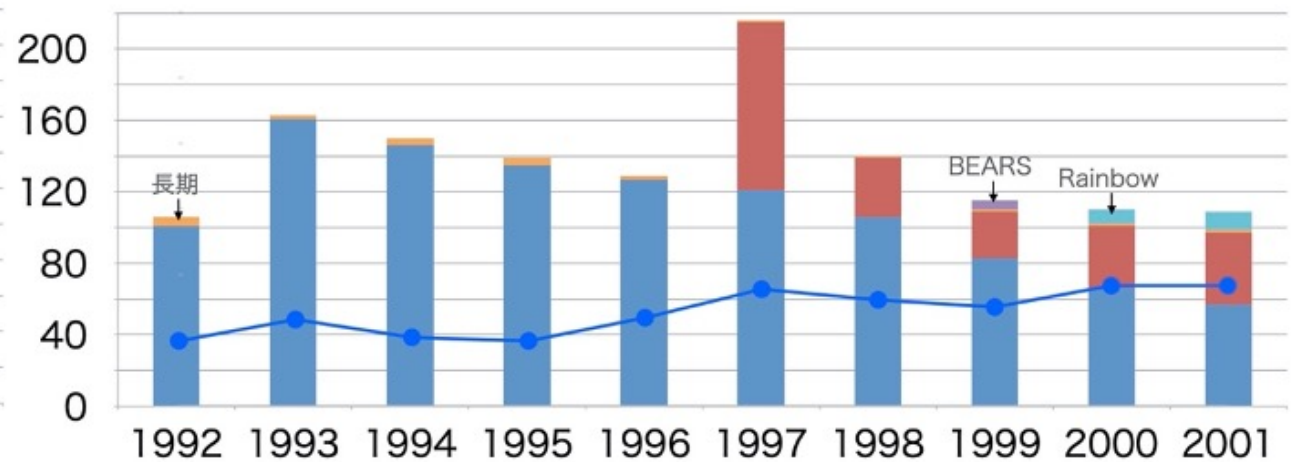


Proposals Transition over 40 yrs

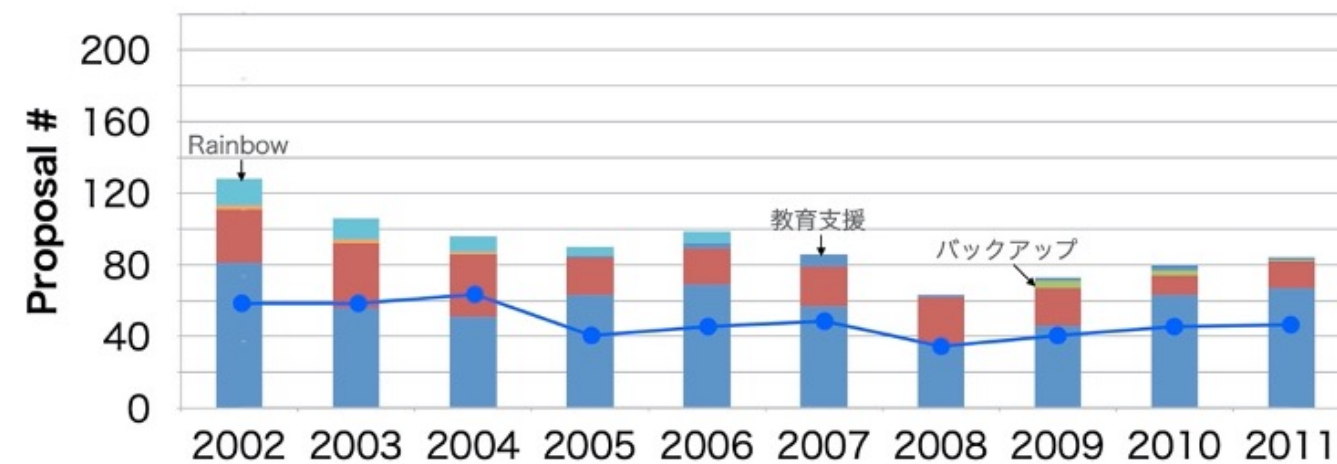
1982-1991



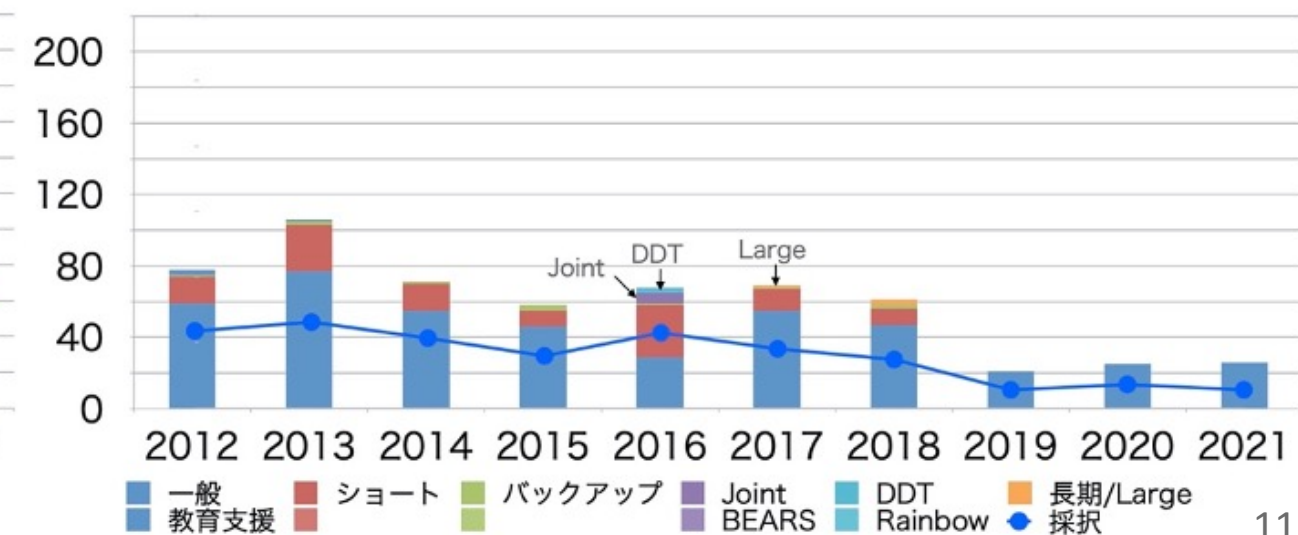
1992-2001



2002-2011



2012-2021

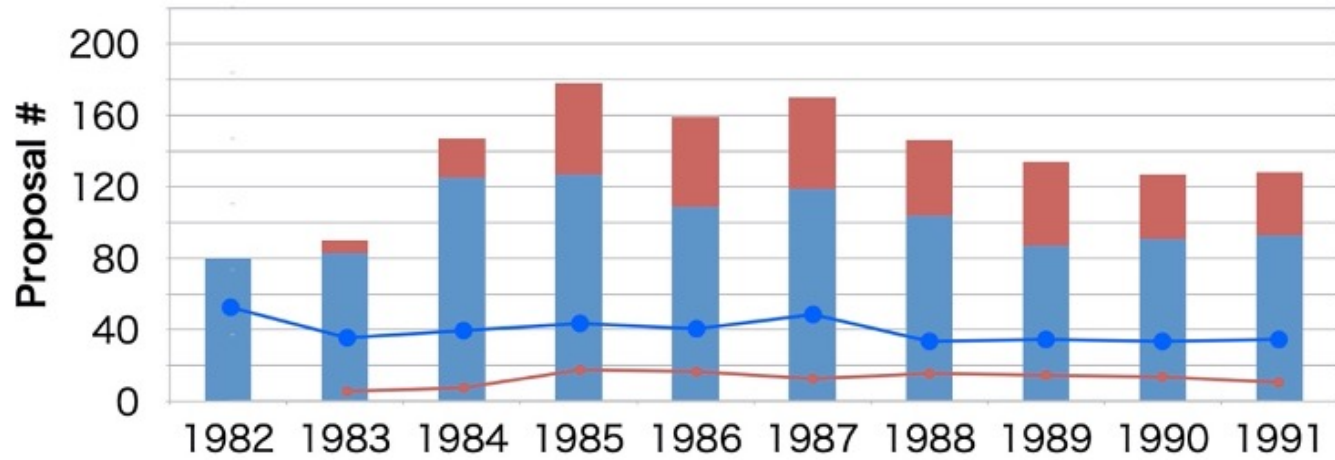


■ 一般 ■ ショート ■ バックアップ ■ Joint ■ DDT ■ 長期/Large
■ 教育支援 ■ BEARS ■ Rainbow ● 採択

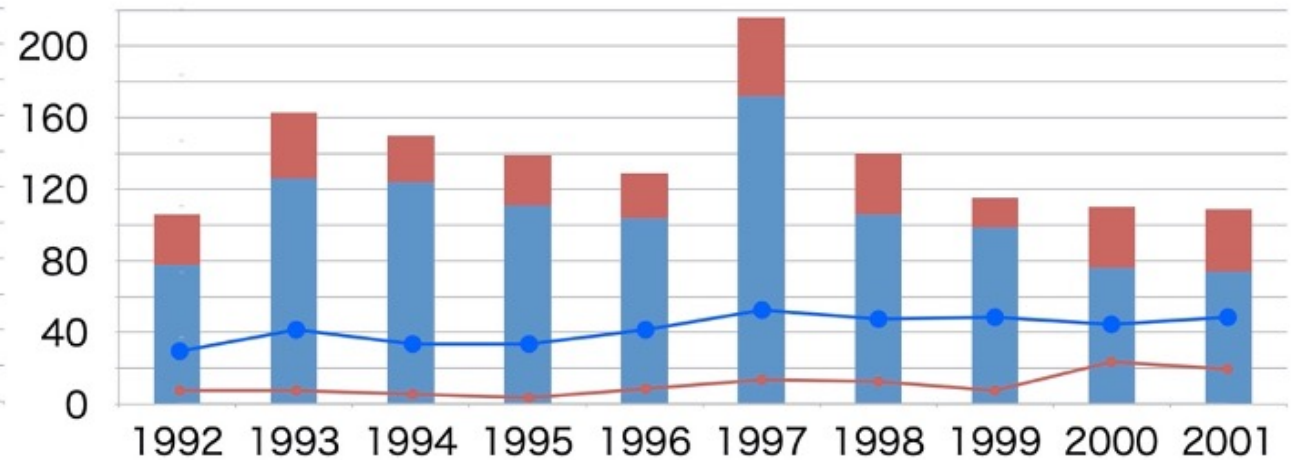
Domestic/Foreign Proposals Transition NINS

over 40 yrs

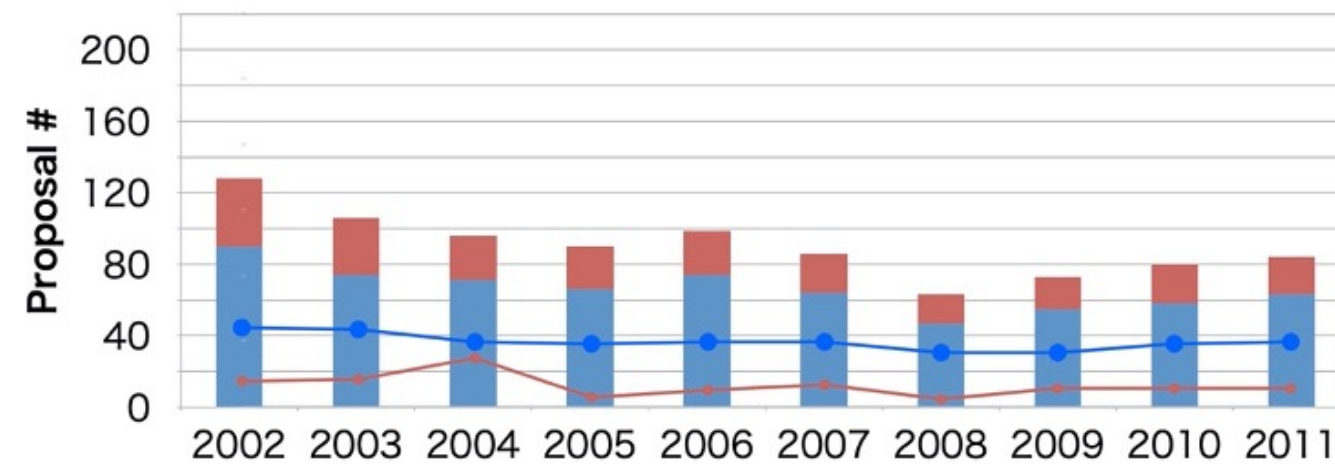
1982-1991



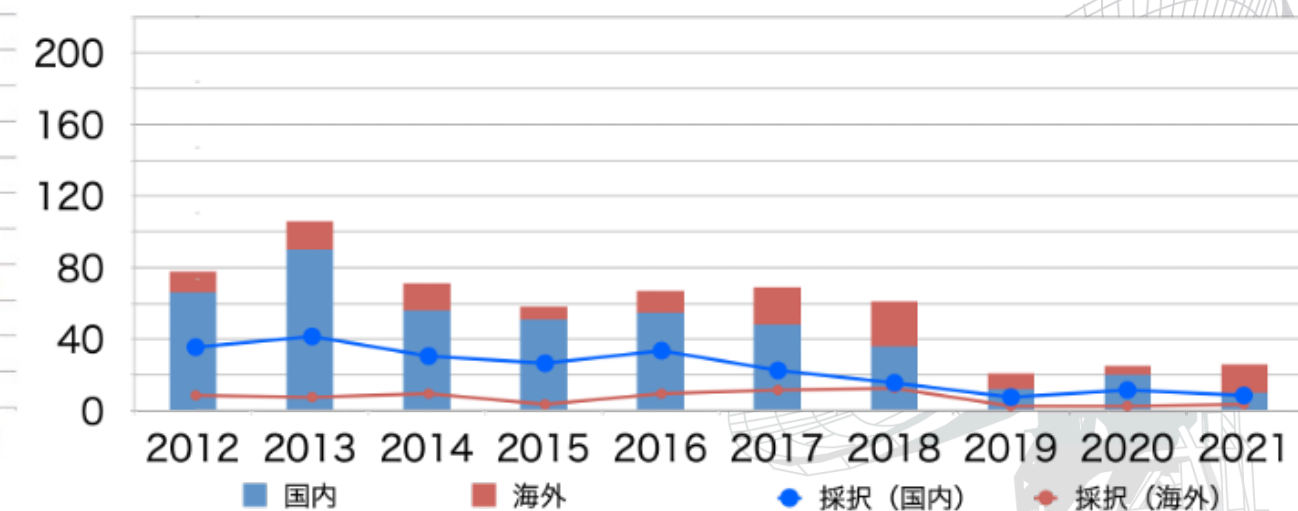
1992-2001



2002-2011

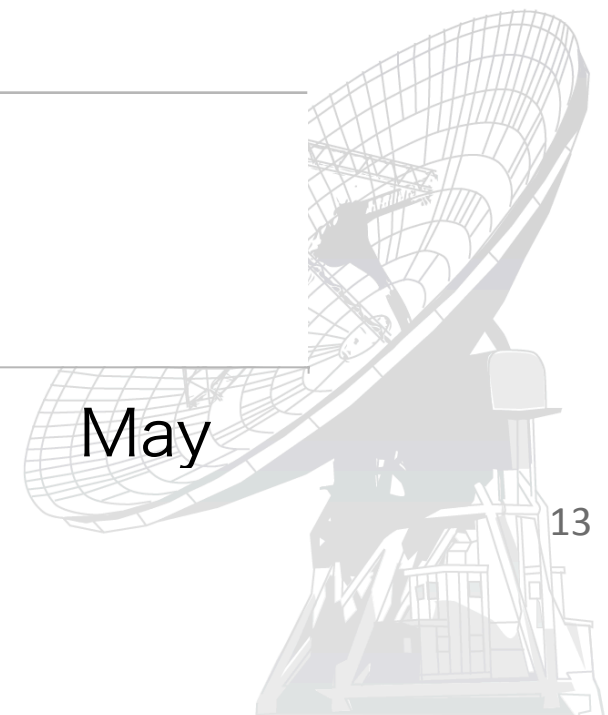
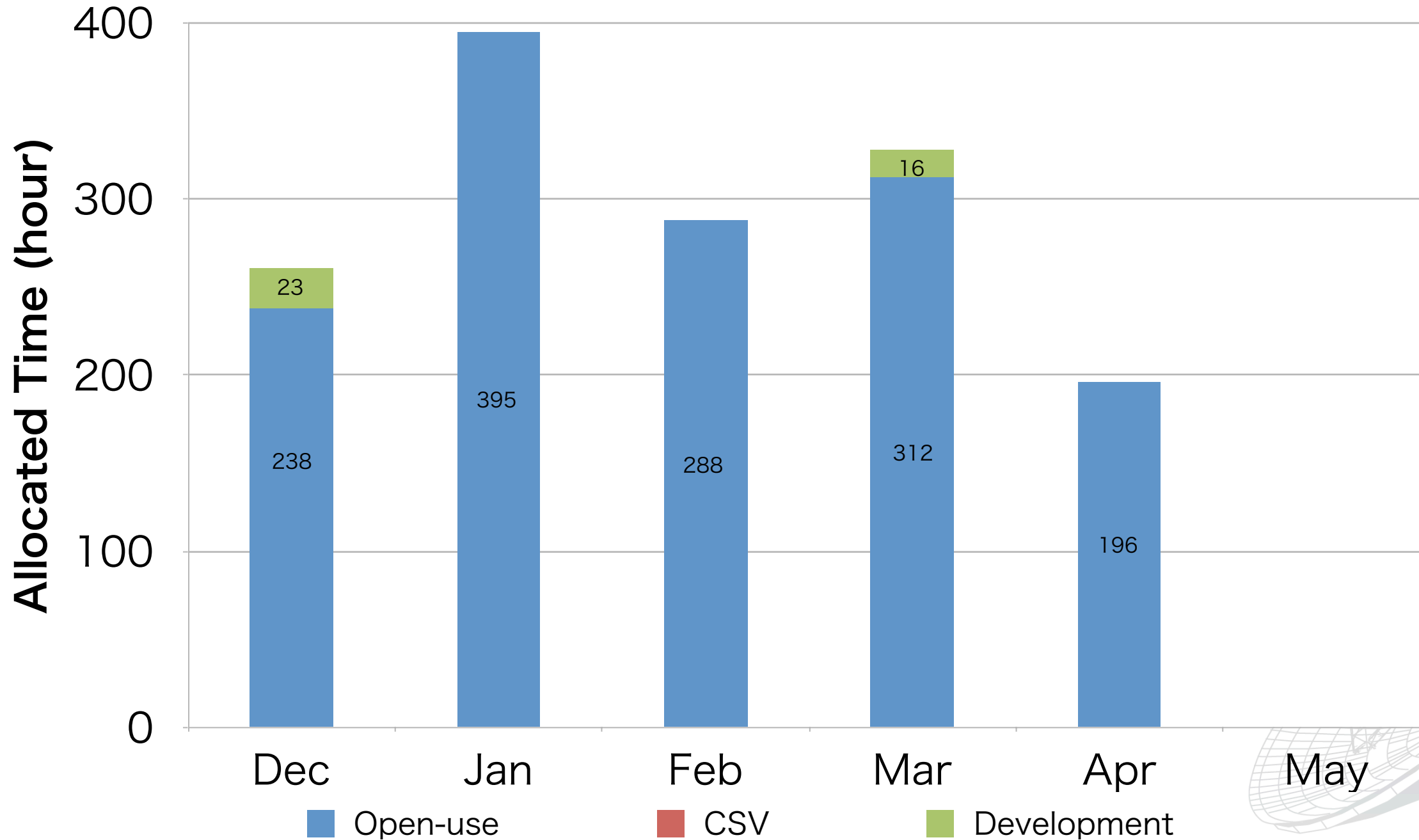


2012-2021

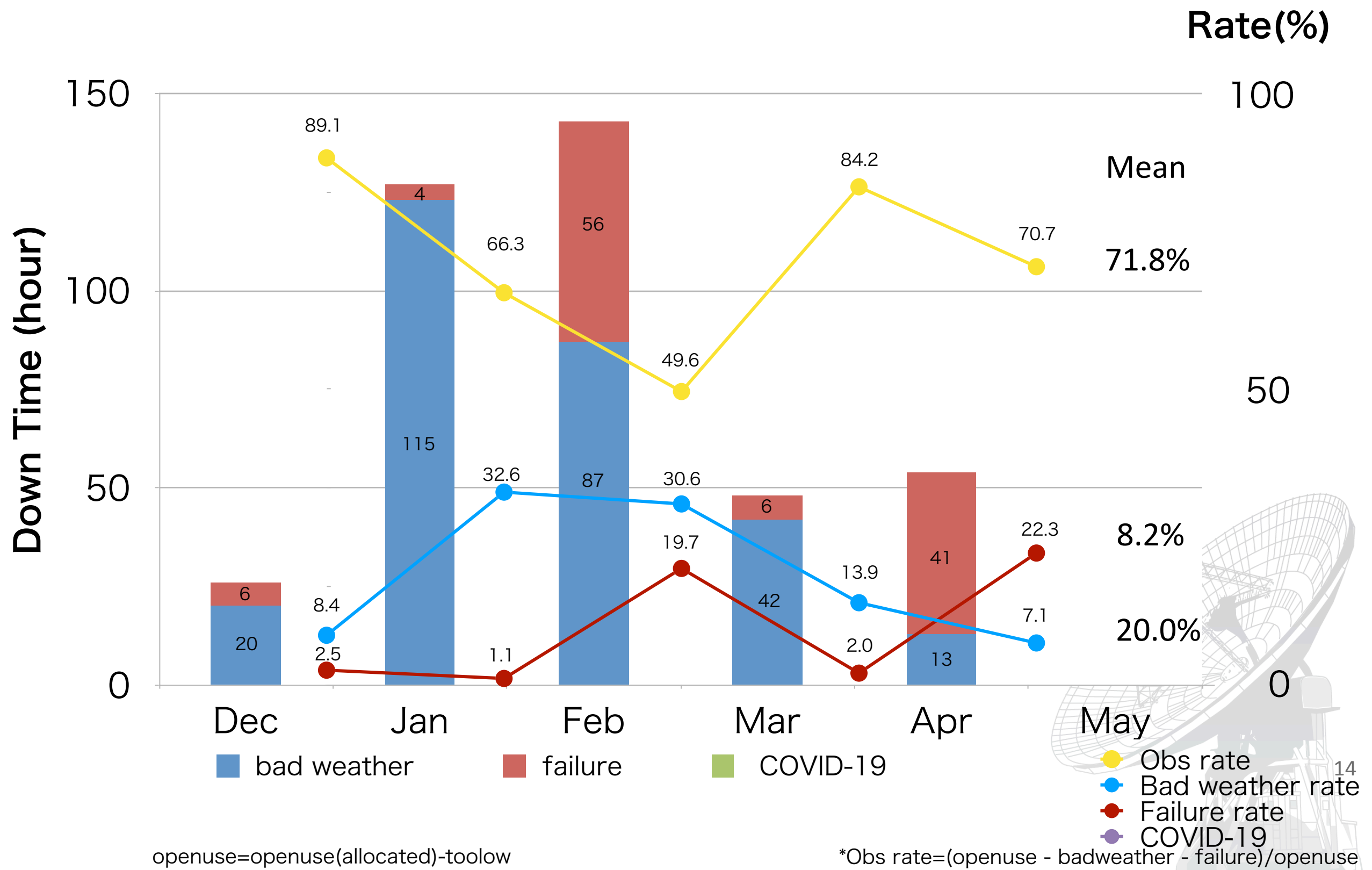


■ 国内 ■ 海外 ● 採択 (国内) ● 採択 (海外)

Observation Statistics 2020-2021

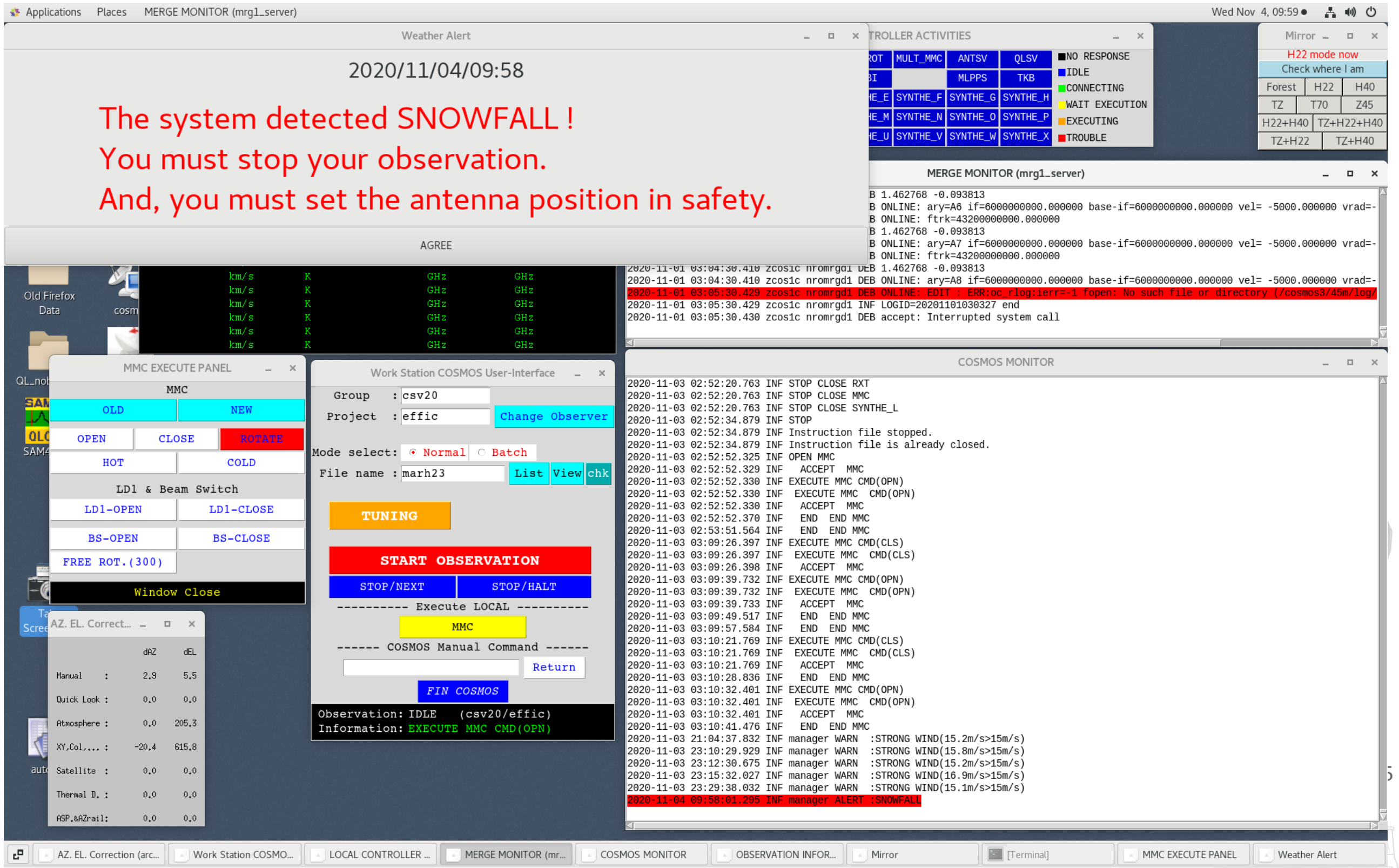


Observation Statistics 2020-2021



Snow Monitor & Snow Alert

The system detected SNOWFALL !
 You must stop your observation.
 And, you must set the antenna position in safety.



The screenshot displays a multi-windowed software interface. The primary window, 'Weather Alert', shows the date and time '2020/11/04/09:58'. A 'LOCAL CONTROLLER ACTIVITIES' window in the top right shows a status table with columns for various components and their states (e.g., NO RESPONSE, IDLE, CONNECTING). Below this, a 'MIRROR' window displays 'H22 mode now' and a grid of observation points: Forest, H22, H40, TZ, T70, Z45, H22+H40, TZ+H22+H40, TZ+H22, and TZ+H40.

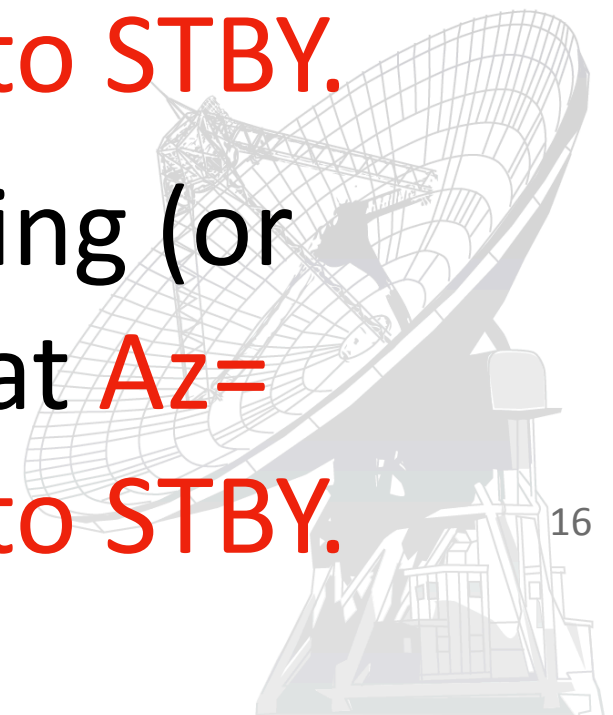
The 'MERCER MONITOR (mrg1_server)' window shows system logs with a red error message: '2020-11-01 03:05:30.429 zcos1c nromrgd1 DEB ONLINE: EDIT : ERR:oc_rlog:ierr=-1 fopen: No such file or directory (/cosmos3/45m/log/...'. The 'COSMOS MONITOR' window shows a detailed log of system events, including '2020-11-03 09:58:01.295 INF manager ALERT :SNOWFALL!'. The 'Work Station COSMOS User-Interface' window shows control buttons for 'TUNING', 'START OBSERVATION', 'STOP/NEXT', and 'STOP/HALT', along with fields for 'Group: csv20' and 'Project: effc'. The 'MMC EXECUTE PANEL' window contains buttons for 'OLD', 'NEW', 'OPEN', 'CLOSE', 'ROTATE', 'HOT', 'COLD', 'LD1-OPEN', 'LD1-CLOSE', 'BS-OPEN', 'BS-CLOSE', and 'FREE ROT.(300)'. A 'Window Close' button is also present.

At the bottom, a 'Terminal' window displays a table of atmospheric and satellite data:

Parameter	dAZ	dEL
Manual	2.9	5.5
Quick Look	0.0	0.0
Atmosphere	0.0	205.3
XY.Col....	-20.4	615.8
Satellite	0.0	0.0
Thermal D.	0.0	0.0
ASP.&AZrail:	0.0	0.0

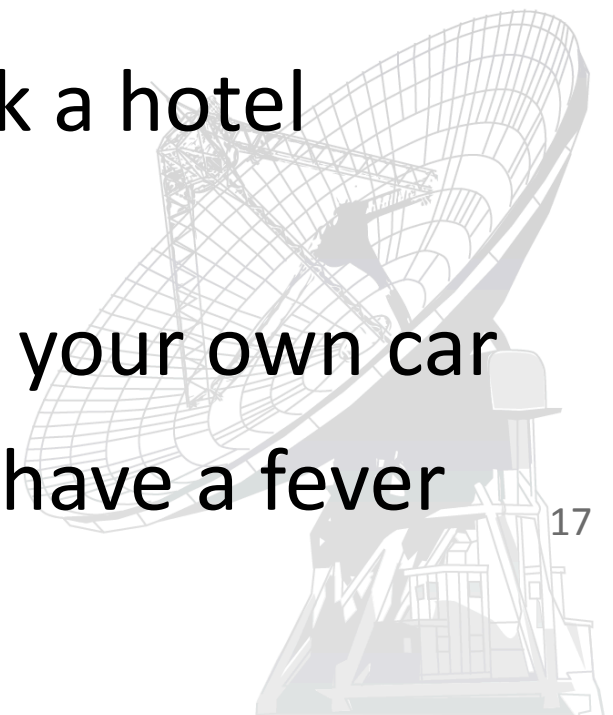
Rules for the Operation at the End of Observations

- Basically, set set the antenna at zenith (El=90d)
- However, if snowfall is predicted for even one hour in the weather forecast between the end of the observation and the next observation, the observers must park the antenna at Az=“135d” and El=11d. Set the antenna to STBY.
- The last observers on Saturday morning (or Friday night) must park the antenna at Az=“135d” and El=11d. Set the antenna to STBY.



On-site Observation at Nobeyama

- Primary observing mode is a remote operation
- However, the observatory will allow you to visit Nobeyama only if you accept the conditions
 - Three observers or less at the same time, but do not observe alone at night (17:00-9:00 JST)
 - No travel support
 - No accommodation arrangement, please book a hotel room by yourself
 - No transportation support, use a rental car or your own car
 - Please do not come to our observatory if you have a fever or other symptoms of COVID-19 infection



This season is the last for NRO Open-use

Thank you for using the NRO open-use for 40 years

